

# MEMORANDUM



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**To:** Project Team Members  
**From:** MWH  
**Date:** 11/11/02  
**Reference:** 10/24/02 Bosque and Leon  
Rivers Watershed Study Team  
Meeting Notes  
**Subject:** Team Meeting Notes

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The following is the “final” copy of the meeting notes from the events and issues discussed during the team meeting held at the USACE office in Fort-Worth, Texas on October 24, 2002.

**Attendees:**

United States Army Corps of Engineers, Fort Worth District (USACE) – Brian Condike, Wayne Elliott  
Brazos River Authority (BRA) – Randy Wooten, Gayle Haecker  
Montgomery Watson Harza (MWH) – David Ebersold, Ronald Hartline, Kartik Gandhi  
The Institute of Environmental and Human Health at Texas Tech University (TIEHH) – Dr. Todd Anderson, Dr. Andrew Jackson  
Environmental Protection Agency (EPA Region 6) – Bob Sturdivant, Cheryl Overstreet  
City of Waco – Rick Howard  
Texas Natural Resource Conservation Commission – Mike Honeycutt

**Welcome and Housekeeping**

Welcome and introduction of meeting attendees.

**USACE**

- Mr. Condike informed the team that Right of Entries (ROEs) had been obtained for all the sampling station sites. He regretted that the ROEs had taken longer than he expected, but he was glad that they were finally complete.
- Mr. Condike indicated that he had mailed the TIEHH Memorandum of Agreement (MOA) for continuation of the project beyond September 2003.
- Mr. Condike noted that there were differences in the actual progress reported by TIEHH and the amount being invoiced from their accounting departments. Dr. Anderson agreed to look into this matter.
- Ms. Haecker said that she needed a modification to the BRA MOA to proceed with the procurement of the gator for assisting with the collection of samples from the field. She was not sure that the current MOA covered the procurement of additional equipment. Mr. Condike stated that this is necessary field sampling equipment and might be covered under

the current MOA. He did agree to review the agreement and, if so, send BRA a letter indicating his approval of the gator rental.

- Mr. Condiike said that he required a project schedule from TIEHH outlining the work that they plan to perform over the remainder of the project.
- Mr. Elliot provided MWH with the ArcIMS software for use in GIS development. Mr. Gandhi said that this completed all the software mentioned in the “Technical Memo No. 1: Determine Applicable Data Themes – Final Report” dated May 2002. He also added that as per prior discussions, “Mr. Sid Encoder”, which was originally included in the list, would be purchased by USACE directly to convert aerial photographs into the required format. He stressed the importance of obtaining the remaining outstanding data from USACE as soon as possible to prevent further delays in the project.

## **TIEHH**

- Dr. Anderson provided MWH a partial sample dataset that included most of the TIEHH data collected over the course of the project.
- Dr. Anderson said that he had submitted an interim summary report dated September 2002 detailing the work that TIEHH had completed to date and their plan of action for the upcoming months.
- Dr. Anderson elaborated regarding the studies that TIEHH was conducting with aquatic organisms. He said that TIEHH would be conducting additional aquatic sampling to evaluate possible human exposure and look at thyroid histology endpoints. They will also perform blood and urine sampling on large mammals.
- Dr. Anderson also said that he planned to conduct a market basket survey in the future.
- Mr. Howard inquired whether TIEHH would be conducting tests on non domesticated large animals. Mr. Condiike said that it is difficult to obtain accurate information as to the exact location where large non-domesticated animals like deer were harvested. He added that deer also have large areas through which they move over a period of time.
- Dr. Jackson gave a presentation on the sediment sampling studies performed by TIEHH describing the uptake of perchlorate compared to other chemicals such as nitrate. He also discussed uptake of perchlorate in tree leaves.

## **MWH**

- Mr. Hartline stressed the importance of receiving comments from BRA on the Draft Lake Belton and Lake Waco Delta Areas Field Sampling Plan, which includes the delta areas field sampling, surface water sampling at the golf course intakes and any additional manual sediment, sediment pore water and surface water sampling. MWH has received comments from all the other team members. The plan needs to be finalized as soon as possible to commence the surface water sampling at the golf course intakes, which would be conducted over a period of 12 months. Ms. Haecker agreed to provide the comments by COB Friday, October 25, 2002.
- Mr. Hartline presented the team members with an updated copy of the integrated project team schedule which was revised based on the where the project currently stood. He indicated that he had not received any comments from the team members on the project schedule distributed in the last team meeting.
- Mr. Hartline updated the team on the longitudinal field sampling and said that all the stations had been installed by BRA and MWH and daily sampling had commenced on October 17, 2002. Ms. Haecker pointed out that there had been heavy rains in the study area during the sampling week and hence all the flows were not base level and she felt that it would be a good idea to conduct daily sampling again at some later date when base flow levels are reestablished. The team thought that this was a good idea and agreed to implement it next year. Mr. Hartline expressed his desire to continue the daily sampling beyond the 7 days

originally proposed because he felt that this was a heavy storm event and this additional sampling would provide information to refine the storm sampling for the coming months. The team agreed to continue the daily sampling until the stream returned to base flow. Dr. Jackson indicated that it would be desirable to extend beyond the the period of the storm pulse, rather than just to the end of the storm pulse.

- Mr. Hartline informed the team that MWH had started installing monitoring wells in the study area, but due to heavy rains, will have to reschedule the drilling when safe access to the drill sites can be established.
- Mr. Hartline brought up the topic for discussion regarding picking up the samples from the autosampler with 24 hours citing safety reasons. Mr. Gandhi said that he had been to all the sites the last week and it was difficult to get to many of the stations especially during or after a storm event. He gave the example of station SCI (Station Creek at A&M property) being inaccessible during heavy storm events due to having to cross the high water level of TRM1 (Tributary M at A&M property). Mr. Condiike stated that, whenever the stations were inaccessible due to safety reasons, he saw no harm in collecting the samples a few days later. However, he requested that these samples be flagged and noted that they were collected beyond 24 hours in the field. Ms. Haecker said that the sites would be more accessible with the arrival of the gator and she foresaw no problem in picking up the samples within 24 hours.
- Mr. Gandhi gave a presentation containing maps and photographs of the actual stations.
- Mr. Hartline proposed an option for the Lake Belton Fate and Transport Study using acoustic doppler profiling. He indicated that this method appears to be a better approach than the dye study as was originally proposed and brought it out for team consideration. He suggested the using of ADCP (Acoustic Doppler Current Profiler) methods for characterizing flow patterns within the lake. Mr. Ebersold added that this would be a better approach as it was less labor intensive and easier to reproduce compared to the dye study. Mr. Ebersold also felt that there would be a lot of effort that would be spent on the dye study and that may not even produce the desired results. The team discussed the issue and agreed on using the ADCP approach for monitoring flow patterns in the lake. Mr. Hartline enquired on how to modify the contract to allow for the use of this approach. Mr. Condiike asked MWH to develop a new scope of work and budget in order to issue a contract ammendment to use the ADCP approach instead of the dye study.
- Mr. Hartline also pointed out that MWH was currently funded for website updates and project reporting through the end of 2002. Mr. Condiike asked MWH to provide a new cost proposal to cover the expenses for MWH for next year. Mr. Condiike also mentioned that MWH was doing a great job on the website and the project website was being used as a model by USACE for other websites.

## **BRA**

- Ms. Haecker said that BRA was working on subcontract agreements for conducting the stream surveying. She also said that all the other issues were already discussed.

## **Next Meeting.**

Mr. Condiike said that the next team meeting would be scheduled on December 5, 2002 on the same day as the RAB meeting. The meeting will be held in BRA's office in Waco.

## **Adjourn**